IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

ARENDI S.A.R.L., Plaintiff, v. LG ELECTRONICS, INC., LG ELECTRONICS USA, INC., and LG ELECTRONICS MOBILECOMM U.S.A., INC., Defendants.	C.A. No. 12-1595-LPS
ARENDI S.A.R.L., Plaintiff, v. APPLE, INC., Defendant.	C.A. No. 12-1596-LPS
ARENDI S.A.R.L., Plaintiff, v. BLACKBERRY LIMITED and BLACKBERRY CORPORATION, Defendants.	C.A. No. 12-1597-LPS

ARENDI S.A.R.L., Plaintiff, v. MICROSOFT MOBILE, INC., Defendant.	C.A. No. 12-1599-LPS
ARENDI S.A.R.L., Plaintiff, v. MOTOROLA MOBILITY LLC, f/k/a MOTOROLA MOBILITY, INC. Defendants.	C.A. No. 12-1601-LPS
ARENDI S.A.R.L., Plaintiff, v. SONY MOBILE COMMUNICATIONS (USA) INC. f/k/a SONY ERICSSON MOBILE COMMUNICATIONS (USA) INC., SONY CORPORATION and SONY CORPORATION OF AMERICA, Defendants.	C.A. No. 12-1602-LPS
ARENDI S.A.R.L., Plaintiff, v. GOOGLE LLC, Defendant.	C.A. No. 13-919-LPS

ARENDI S.A.R.L., Plaintiff, v. OATH HOLDINGS INC. and OATH INC., Defendants.	C.A. No. 13-920-LPS

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MEMORANDUM OPINION

August 19, 2019
Wilmington, Delaware

STARK, U.S. District Judge:

Plaintiff Arendi S.A.R.L. ("Arendi") sued Defendants LG Electronics, Inc., LG Electronics USA, Inc., LG Electronics MobileComm U.S.A., Inc. (together, "LG"), Apple Inc. ("Apple"), Blackberry Limited, Blackberry Corporation (together, "Blackberry"), Microsoft Mobile, Inc. f/k/a Nokia Inc. ("MMI"), Motorola Mobility LLC f/k/a Motorola Mobility Inc. ("Motorola"), Sony Mobile Communications (USA) Inc., Sony Corporation, Sony Corporation of America (together, "Sony"), Google Inc. ("Google"), Oath Holdings Inc., and Oath Inc. (together, "Oath"), alleging patent infringement. (C.A. No. 12-1595 D.I. 1; C.A. No. 12-1596 D.I. 1; C.A. No. 12-1597 D.I. 1; D.I. 12-1599 D.I. 1; D.I. 12-1601 D.I. 1; C.A. No. 12-1602 D.I. 1; C.A. No. 13-919 D.I. 1; C.A. No. 13-920 D.I. 1) Arendi alleges that LG, Apple, Blackberry, MMI, Motorola, and Sony infringe Arendi's U.S. Patent Nos. 7,917,843 ("the '843 patent") and 8,306,993 ("the '993 patent"). Arendi alleges that Oath infringes the '843 and '993 patents, and also Arendi's U.S. Patent No. 7,496,854 ("the '854 patent"). Arendi alleges that Google infringes the '843, '993, and '854 patents as well as Arendi's U.S Patent No. 7,921,356 ("the '356 patent"). Each asserted patent is entitled, "Method, System and Computer Readable Medium for Addressing Handing from a Computer Program."

Presently before the Court are the parties' disputes over the meaning of certain terms in the asserted claims. The parties submitted technology tutorials (C.A. No. 13-919 D.I. 115, 116), and two sets of claim construction briefs: one pertaining to terms appearing in the '843 and '993 patents, which is joined by all defendants (C.A. 12-1595 D.I. 111, 112, 119, 120); and the other pertaining to terms that only appear in the '854 patent, which is joined by Defendants Google and Oath (C.A. No. 13-919 D.I. 117, 119, 127, 130). The Court held a claim construction hearing on July 26, 2019. (C.A. No. 12-1595 D.I. 125 ("Tr."))

I. LEGAL STANDARDS

The ultimate question of the proper construction of a patent presents an issue of law. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837 (2015) (citing *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388-91 (1996)). "It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (citation and internal quotation marks omitted). "[T]here is no magic formula or catechism for conducting claim construction." *Id.* at 1324. Instead, the court is free to attach the appropriate weight to appropriate sources "in light of the statutes and policies that inform patent law." *Id.*

"[T]he words of a claim are generally given their ordinary and customary meaning . . . [which is] the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1312-13 (internal citations and quotation marks omitted). "[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent." *Id.* at 1321 (internal quotation marks omitted). The patent "specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

While "the claims themselves provide substantial guidance as to the meaning of particular claim terms," the context of the surrounding words of the claim also must be considered. *Phillips*, 415 F.3d at 1314. Furthermore, "[o]ther claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment . . . [b]ecause claim terms are normally used consistently throughout the patent." *Id.* (internal citation omitted).

It is likewise true that "[d]ifferences among claims can also be a useful guide . . . . For example, the presence of a dependent claim that adds a particular limitation gives rise to a

presumption that the limitation in question is not present in the independent claim." *Id.* at 1314-15 (internal citation omitted). This "presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim." *SunRace Roots Enter. Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003).

It is also possible that "the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316. It bears emphasis that "[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (internal quotation marks omitted).

In addition to the specification, a court "should also consider the patent's prosecution history, if it is in evidence." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996). The prosecution history, which is "intrinsic evidence," "consists of the complete record of the proceedings before the [Patent and Trademark Office] and includes the prior art cited during the examination of the patent." *Phillips*, 415 F.3d at 1317. "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.*

"In some cases, . . . the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." *Teva*, 135

S. Ct. at 841. "Extrinsic evidence consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980. For instance, technical dictionaries can assist the court in determining the meaning of a term to those of skill in the relevant art because such dictionaries "endeavor to collect the accepted meanings of terms used in various fields of science and technology." *Phillips*, 415 F.3d at 1318. In addition, expert testimony can be useful "to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Id.* Nonetheless, courts must not lose sight of the fact that "expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence." *Id.* Overall, while extrinsic evidence "may be useful to the court," it is "less reliable" than intrinsic evidence, and its consideration "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1318-19. Where the intrinsic record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999).

Finally, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that "a claim interpretation that would exclude the inventor's device is rarely the correct interpretation." *Osram GmbH v. Int'l Trade Comm'n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (internal quotation marks omitted).

II. CONSTRUCTION OF DISPUTED TERMS[1]

A. '843 and '993 Patents[2]

1. "document"[3]

Arendi "electronic document containing textual information"
Defendants "a word processing or spreadsheet file into which text can be entered"
Court "a word processing, spreadsheet, or similar file into which text can be entered"

With respect to the term "document," the parties have two disputes. First, the parties disagree as to whether a "document" must be a word processing or spreadsheet file (as Defendants contend), or whether it may be any electronic display of text (as Arendi contends). (D.I. 111 at 5-8; D.I. 112 at 4-8) Second, the parties disagree as to whether a "document" is a file into which text can be entered (as Defendants contend), or whether it may be non-editable (as Arendi contends). (D.I. 111 at 8-9; D.I. 112 at 9-11) The Court addresses each dispute in turn.

First, although the claims use "document" in a manner more narrow than its plain meaning, it is not solely limited to conventional word processing and spreadsheet files. As the patents explain, the invention relates to "name and address handling . . . within a document

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[1] The Court will adopt the parties' agreed-upon constructions. The Court will also adopt the definition of a person of ordinary skill provided by Arendi (D.I. 112 at 4), which Defendants agree should apply (D.I. 119 at 18 n.7; Tr. at 84).

[2] In this section, unless otherwise indicated, citations to the record are to C.A. No. 12-1595, and "Defendants" refers to all defendants.

[3] The term "document" appears in all asserted claims.

created by [a] computer program." ('843 patent,[4] 1:18-26) Each described embodiment either uses a word processing program or a spreadsheet program, and the patents' figures specifically depict the use of Microsoft® Word and Microsoft® Excel. ('843 patent, Figs. 3-15) The patents also effectively "define[]" the invention as limited to "word processing documents:"

> Although ***the present invention is defined in terms of word processing documents***, such as WORD™ documents and EXCEL™ spreadsheets, ***the present invention is applicable to all types of word processing documents*** such as NOTEPAD™, WORDPAD™, WORDPERFECT™, QUATRO-PRO™, AMIPRO™, etc. as will be readily apparent to those skilled in the art.

('843 Patent, 9:61-67) (emphasis added) Yet the patents also define the term "word processor" more broadly than its plain meaning:

> In recent years, with the advent of ***programs, such as word processors, spreadsheets, etc. (hereinafter called "word processors")*** users may require retrieval of information, such as name and address information, etc., for insertion into a document, such as a letter, fax, etc., created with the word processor.

(*See* '843 patent, 1:28-32) (emphasis added)

The patents' definition of the invention "in terms of word processing documents" must be read in light of its definition of "word processor." Notably, inclusion of the word "etc." in the definition of "word processor" means that "word processor" includes not only conventional word processors and spreadsheet programs, but also similar programs that are not conventionally thought of as word processors or spreadsheets. *See Indacon, Inc. v. Facebook, Inc.*, 824 F.3d 1352, 1355 (Fed. Cir. 2016) ("[T]he use of 'etc.' in [a] definition implies ***additional, but similar*** forms of expression.") (emphasis added); *see also Sports Graphics, Inc. v. United States*, 24 F.3d

[4] The '843, '993, and '356 patents are both continuations of the same patent application, so they share the same specification. The '854 patent has a similar specification.

1390, 1392 (Fed. Cir. 1994) ("[W]here an enumeration of specific things is followed by a general word or phrase, the general word or phrase is held to refer to ***things of the same kind*** as those specified.") (emphasis added). Applying this definition of "word processor," it follows that "document" includes not only conventional word processor files and spreadsheet files, but also files from similar programs.

It follows that neither side's proposed construction is correct. Arendi's proposed construction of "document" is overbroad because it is not limited to documents that are similar to word processing or spreadsheet files, ignoring that "the present invention is defined in terms of" such word processing documents. ('843 patent, 9:61-67) On the other hand, Defendants' construction is unduly narrow. Although Defendants' construction of "document" properly includes files produced by word processors (as that term is conventionally used) and spreadsheet programs, Defendants would exclude files created by any other type of computer program. In doing so, Defendants essentially read the "etc." out of the patents' definition of "word processors." *See Hormone Research Found., Inc. v. Genentech, Inc.*, 904 F.2d 1558, 1563 (Fed. Cir. 1990) ("[A] patentee is free to be his or her own lexicographer . . . and thus may use terms in a manner contrary to or inconsistent with one or more of their ordinary meanings.") (internal citations omitted).

Defendants' suggestion that the claimed invention would not work outside of the context of word processors (as that term is conventionally understood) lacks merit. (*See* D.I. 111 at 7) Defendants argue that the purpose of the invention is "to address the problem of locating and inserting contact information into a document being edited by a user," and that the patents "do not suggest how the invention would work outside the context" of a user working in a word processor. (*See* D.I. 111 at 5-6) But, as Arendi points out (D.I. 112 at 4), the record discloses no

reason why the methods taught in the specification could not be applied to certain other computer programs – for example, a web browser in which a user is drafting an email.

For these reasons, the Court will construe "document" in relevant part as "a word processing, spreadsheet, or similar file."

Turning to the parties' second dispute – whether a "document" is a file into which text can be entered (as Defendants contend), or whether it may be non-editable (as Arendi contends) – the Court agrees with Defendants. (*See* D.I. 111 at 8-9; D.I. 112 at 9-11)

A "document" as used here must be editable. As the Abstract explains, the invention is directed to "look[ing] up data corresponding to what [a] user ***types***, or ***partly typed***," such that the data is "displayed and ***possibly entered*** into the word processor, if such related data exists." ('843 patent, Abstract) (emphasis added) The patents define "word processor" more broadly than the plain meaning of the term, but the patent's definition of the term – "word processors, spreadsheets, etc." – is necessarily limited to computer programs in which a user can enter data. *See Indacon*, 824 F.3d at 1355. The 15 invention-specific figures, the seven examples, and the "object[s] of the invention" provided in the specification support the understanding that the invention's purpose is to retrieve and possibly enter data into a document based on information entered by the user. (*See, e.g.*, '843 patent, Figs. 1-15, 1:53-2:34, 5:59-8:67) This understanding is reinforced by the patents' repeated use of the phrase "the present invention is defined in terms of" to limit the invention to a particular technological context.[5] The patents never suggest how

[5] For example:

- "Although the present invention is defined in terms of information management or is database programs, such as OUTLOOK™, etc., the present invention is applicable to all types of information management or database programs such as ACCESS™,

the invention would operate if the document were non-editable; if the document were non-editable, it is unclear how a user could type data and how a computer could enter related address data into the document. The term "document" must be construed consistent with the patents' repeated and consistent requirement in the specification that documents be editable. *See GPNE Corp. v. Apple Inc.*, 830 F.3d 1365, 1370-71 (Fed. Cir. 2016). This is "faithful to the invention disclosed in the specification." *Wi-Fi One, LLC v. Broadcom Corp.*, 887 F.3d 1329, 1346 (Fed. Cir. 2018).

Arendi's claim differentiation argument lacks merit. (*See* D.I. 120 at 9-10) Arendi argues that requiring a "document," in itself, to be editable would render redundant limitations in certain claims that explicitly require the document to be editable. (*Id.*) But the claims Arendi differentiates are not an independent claim and one of its dependent claims – a situation in which claim differentiation is at its strongest; instead, they are two distinct independent claims. *See*

ORACLE™, DBASE™, RBASE™, CARDFILE™, including 'flat files,' etc., as will be readily apparent to those skilled in the art." ('843 patent, 10:1-7)

- "Although the present invention is defined in terms of providing an input device, such as a button 42 in a word processor for address handling therein, the present invention may be practiced with all types of input devices, such as touch screen, keyboard button, icon, menu, voice command device, etc., as will be readily apparent to those skilled in the art." ('843 patent, 10:8-13)

- "Although the present invention is defined in terms of a program retrieving information from a document before searching a database, the user may select the information in the document to be searched by the program in the database (e.g., by highlighting, selecting, italicizing, underlining, etc.), as will be readily apparent to those skilled in the art." ('843 patent, 10:14-19)

- "Although the present invention is defined in terms of a program retrieving a name or portion thereof from a document before searching a database the program may retrieve an address or portion thereof from the document before searching the database and insert, correct, complete, etc., the retrieved address based on the information found in the database corresponding to the retrieved address or portion thereof, as will be readily apparent to those skilled in the art." ('843 patent, 10:20-27)

generally Atlas IP, LLC v. Medtronic, Inc., 809 F.3d 599, 607 (Fed. Cir. 2015) (explaining that because "patentees often use different language to capture the same invention," doctrine of claim differentiation is "discount[ed] where it is invoked based on independent claims rather than the relation of an independent and dependent claim"). *Atlas*' reasoning carries special force here, where the two independent claims on which Arendi relies are in different patents filed years apart. *See id.* Arendi's claim differentiation argument, therefore, does not outweigh "the clear import of the specification." *See Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1331 (Fed. Cir. 2009).

For these reasons, the Court construes a "document," in relevant part, as "a file into which text can be entered."

2. "first information"[6]

Arendi "text in a document that can be used as input for a search operation in a source external to the document"
Defendants "information entered by the user into a document"
Court "text in a document that can be used as input for a search operation in a source external to the document"

The parties dispute whether "first information" must be entered by a "user" (as Defendants propose) or whether it need not be entered by the user (as Arendi proposes). (D.I. 111 at 12; D.I. 112 at 11) The Court agrees with Arendi.

Nothing in the patents justifies limiting "first information" to information entered by "the user." The claims recite a "user" who enters a user command (e.g., pressing a button) to "initiate an operation" on the first information (e.g., looking up contact information). (*See, e.g.*, '843

[6] The term "first information" appears in claims 1, 8, 23, and 30 of the '843 patent.

patent, cl. 1; 5:63-6:5) Defendants' construction would require the first information to be entered by the same user who ultimately initiates the lookup operation. Nothing in the specification indicates that it is "essential," "necessary," or even "important" for the same user both to enter first information and initiate the lookup operation. Defendants' construction is unduly limiting.[7] *See Hill-Rom*, 755 F.3d at 1372.

3. "computer program"[8]

Arendi "independently executable computer application"
Defendants "a self-contained set of instructions, as opposed to a routine or library, intended to be executed on a computer so as to perform some task"
Court "a self-contained set of instructions, as opposed to a routine or library, intended to be executed on a computer so as to perform some task"

Defendants' construction was first proposed by Arendi in a related case, which settled before the Court issued a Markman opinion. (D.I. 111 at 10) Arendi contends that its prior construction is not wrong, but that its current construction – which is taken from the PTAB's subsequent construction of "application program" in a related IPR – is both clearer and "avoids a possible pitfall" in Defendants' construction: that Defendants' construction might be read (improperly, in Arendi's view) to include modules and utilities, which, to Arendi, are ***not***

[7] For example, nothing in the specifications justifies reading the term "first information" to exclude an embodiment in which one user enters a name (i.e., "first information") and another user clicks a button to initiate retrieval of an address corresponding to that name. Nor does anything in the specifications justify reading "first information" to exclude an embodiment in which a user opens an existing document that already has a name (entered by someone else), and the user initiates an operation to retrieve an address corresponding to the first information. Defendants' construction would improperly exclude these embodiments.

[8] The terms "computer program," "first computer program," and "second computer program" appear in claims 1, 17, 19, and 23 of the '843 patent, and claims 93, 98, and 101 of the '854 patent.

"computer programs." (D.I. 112 at 12-14; Tr. at 69) Defendants argue that a module or utility ***could be*** a "computer program," depending on how the module or utility is implemented. (D.I. 119 at 12-14; Tr. at 76)

The Court agrees with Defendants' that modules and utilities can be "computer programs." As Defendants point out (D.I. 119 at 12-14), Arendi's position that neither a "module" nor a "utility" can be an "application program" was squarely rejected by the PTAB in a decision that was affirmed by the Federal Circuit. (*See* D.I. 107-3 Ex. 6T at 10-11) The Federal Circuit's affirmance is not dispositive; it establishes the meaning of "application program" but not necessarily the meaning of "computer program," which is the term being disputed before the Court.[9] Even so, the Court is persuaded by the PTAB's reasoning that nothing in the specification categorically prevents modules and utilities from being "application programs." This same reasoning applies with equal force to "computer program."

Notwithstanding certain of Arendi's rhetoric (*see, e.g.*, D.I. 120 at 10-11), Arendi has only identified one potential point of disagreement between the parties pertinent to this claim term: whether a module or utility can possibly be a "computer program." (*See id.*) In resolving this dispute, the Court has (for now) met its obligation to resolve "actual" claim construction disputes. *See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

[9] Also, the PTAB evaluated the claims under the broadest reasonable interpretation standard. (*See* D.I. 107-3 Ex. 6T at 6-11)

4. "to determine if the first information is at least one of a plurality of types of information that can be searched for"[10]

Arendi "to determine if the first information belongs to one or more of several predefined categories of information that can be searched for"
Defendants Indefinite
Court "to determine if the first information belongs to one or more of several predefined categories of identifying information (e.g., a name) or contact information (e.g., a phone number, a fax number, or an email address) that can be searched for in an information source external to the document"

Claims 1 and 23 of the '843 patent include the following limitation:

> while the document is being displayed, analyzing in a computer process first information from the document ***to determine if the first information is at least one of the plurality of types of information that can be searched for*** to find second information related to the first information.

(Emphasis added) Defendants contend that the highlighted claim term is indefinite because it fails to describe (1) ***what kind*** of "information" is claimed and (2) ***where*** the search is performed. (D.I. 111 at 13) Defendants have not met their burden to show indefiniteness by clear and convincing evidence. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014).

A POSA would understand with reasonable certainty what kind of information is "first information." The specification makes clear that the invention relates to address handling. (*See e.g.*, '843 patent, Title ("Method, System and Computer Readable Medium for ***Addressing Handling*** from a Computer Program") (emphasis added); '843 patent, Abstract (noting that invention "look[s] up data corresponding to . . . [a] ***name and/or address***") (emphasis added); '843 patent, 1:18-20 ("This invention relates to a method, system and computer readable medium

[10] This term appears in claims 1 and 23 of the '843 patent.

for ***name and address handling*** . . . .") (emphasis added); '843 patent, 1:53-55 ("[A]n object of the present invention is to provide a method, system and computer readable medium for ***address handling*** within a computer program . . . .") (emphasis added); '843 patent, 10:8-10 ("[T]he present invention is defined in terms of providing an input device, such as a button 42 in a word processor for ***address handling therein*** . . . .") (emphasis added); '843 patent, 10:20-27 ("Although the present invention is defined in terms of a program ***retrieving a name . . . from a document before searching a database***[,] ***the program may retrieve an address . . . from the document before searching the database*** and insert, correct, complete, etc. the retrieved address based on the information found in the database.") (emphasis added)) Therefore, a POSA reviewing the specification would understand that "first information" must be identifying (e.g., name) and/or contact (e.g., address) information.[11] The Court's construction reflects this conclusion. *See Phillips*, 415 F.3d at 1313.

Defendants' argument based on Arendi's position during the IPR of the '843 patent is unpersuasive. (*See* D.I. 119 at 19) To Defendants, Arendi's contention that "mere nouns and verbs" ***are not*** "first information" would leave a POSA uncertain as to what kinds of information ***are*** "first information." (*Id.*) The Court disagrees. Arendi's IPR advocacy does nothing to disturb a POSA's understanding, based on the specification's clear focus on address handling, that "first information" is limited to identifying and/or contact information.

[11] The Court disagrees with Arendi that "first information" could also be "calendaring information," such as a date. (*See* Tr. at 91) Nothing in the specification suggests that "first information" could be calendaring information, and the specification does not explain how the inventive methods of address handling would even work if the "first information" were calendaring information. *See Phillips*, 415 F.3d at 1313 (noting that claim terms are to be read "in the context of the entire patent"). Hence, including calendaring information within the meaning of "first information" would begin to cast serious doubt on the definiteness of the term. *See Liberty Ammunition, Inc. v. United States*, 835 F.3d 1388, 1397 (Fed. Cir. 2016) (rejecting construction that would render claim term indefinite).

Defendants' second argument – that a POSA would not know ***where*** to search for second information – is similarly unpersuasive. (*See* D.I. 111 at 13) As Arendi points out (D.I. 120 at 16), both claim 1 and claim 23 of the '843 patent tell a POSA where the search is performed:

> performing a search using at least part of the first information as a search term in order to find the second information, . . . ***in an information source external to the document*** . . . .

(Emphasis added)

The claims' phrase "in an information source external to the document" provides a POSA with reasonable certainty as to where the search using the "first information" is performed. *See generally AllVoice Computing PLC v. Nuance Commc'ns, Inc.*, 504 F.3d 1236, 1242 (Fed. Cir. 2007) ("'A person of ordinary skill is also a person of ordinary creativity, not an automaton.'") (quoting *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007)). For additional clarity, the Court includes this phrase in its construction.

5. "wherein the computer implemented method is configured to perform each one of action (i), action (ii), and action (iii) using the first contact information previously identified as a result of the analyzing"[12]

Arendi "wherein the computer implemented method is capable of performing each one of action (i), action (ii), and action (iii) using the first contact information previously identified as a result of the analyzing"
Defendants Indefinite
Court "wherein the computer implemented method is capable of performing each one of action (i), action (ii), and action (iii) using the first contact information previously identified as a result of the analyzing"

Claim 1 of the '993 patent recites in relevant part:

> after identifying the first contact information, performing at least one action from a set of potential actions, using the first contact

[12] This term appears in claims 1, 9, and 17 of the '993 patent.

> information previously identified as a result of the analyzing, wherein the set of potential actions includes:
>
> (i) initiating an electronic search in the contact database for the first contact information while it is electronically displayed in order to find whether the first contact information is included in the contact database; . . .
>
> (ii) initiating electronic communication using the first contact information; and
>
> (iii) allowing the user to make a decision whether to store at least part of the first contact information in the contact database as a new contact or to update an existing contact in the contact database;
>
> ***wherein the computer implemented method is configured to perform each one of action (i), action (ii), and action (iii) using the first contact information previously identified as a result of the analyzing*** . . . .

(Emphasis added) Claims 9 and 17 of the '993 patent recite similar limitations, but claim a computer readable medium and an apparatus, respectively. Defendants contend that the bolded limitation (referred to as the "wherein" limitation for brevity) and the equivalent limitations in claims 9 and 17 are indefinite. (*See* D.I. 111 at 16-18) The Court disagrees.

Defendants' first contention – that the "wherein" limitation impermissibly mixes structural limitations and method steps – is incorrect. (*See id.*) Defendants argue that the "wherein" limitation "makes no sense because, unlike a device, a method cannot be 'configured to' do anything: instead, a method involves taking specific actions/steps." (*Id.*) The Court disagrees; a POSA would know, reading the "wherein" limitation, that the recited method is limited to one practiced with a structure (e.g., a computer program) that is capable of performing actions (i), (ii), and (iii). *See AllVoice*, 504 F.3d at 1242 ("A person of ordinary skill is also a person of ordinary creativity, not an automaton."). The claim format used here – one that claims a method performed with a specific structure – has been repeatedly upheld by the Federal

Circuit. *See, e.g.*, *Microprocessor Enhancement Corp. v. Texas Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008) (reversing district court holding of indefiniteness where claims included both structural and method step limitations); *HTC Corp. v. IPCom GmbH & Co., KG*, 667 F.3d 1270, 1277 (Fed. Cir. 2012) (same).

Defendants' second contention – that the "wherein" limitation could reasonably be interpreted in any of three different ways – is also unpersuasive. (*See* D.I. 111 at 16) Defendants argue that the "wherein" limitation could reasonably be interpreted to mean that the claimed computer implemented method: (1) "***is capable of performing*** each of action (i), action (ii), and action (iii)" (as Arendi proposes), or alternatively (2) "***is practiced on a device configured to perform*** each of action (i), action (ii), and action (iii)," or could instead be understood as (3) "***performs*** each of action (i), action (ii), and action (iii)." (D.I. 111 at 16) (emphasis in original) Thus, to Defendants, the "wherein" limitation is indefinite. The Court disagrees. A POSA would reasonably understand that Defendants' alternative (1) is what is meant by the "wherein" term. Constructions (2) and (3) cannot be correct because they unduly narrows the structure with which the claimed method is performed to one which is configured to perform all three actions or in which all three actions must be performed – both of which contradict the claim's explicit statement that only "at least one action" of actions (i), (ii), or (iii) is performed (so the device does not even necessarily need to be configured to perform more than one of these actions).

For these reasons, Defendants have not met their burden to demonstrate, by clear and convincing evidence, that the "wherein" limitation and equivalent limitations in claims 9 and 17 are indefinite. *See Nautilus*, 572 U.S. at 901.

6. "that allows a user to enter a user command to initiate an operation"[13]

Arendi "that allows a user to enter an input or series of inputs to initiate an operation"
Defendants "so that one user interaction with the input device is sufficient to cause initiation of an operation"
Court "that allows a user to enter an input or series of inputs to initiate an operation"

The parties dispute whether a user command is limited to "one user interaction" (as Defendants argue) or whether a user command may include a "series of inputs" (as Arendi argues). (D.I. 111 at 18-20; 112 at 16-18) The Court agrees with Arendi.

Nothing in the intrinsic record supports narrowing "user command" to a single user interaction with an input device. The specifications explain that an operation can be initiated when a user "clicks, selects, commands, etc. [a] button via [an] appropriate input device, such as a touchscreen button, keyboard button, icon, menu choice, voice command device etc." ('843 patent, 3:46-48) Although some of these interactions might be considered a single "user interaction," others – such as the use of a menu or voice command – would almost certainly require multiple mouse motions and clicks, key presses, or another series of inputs. (*Id.*; *see also* '843 patent, cl. 14 (limiting "input device" to "menu" and "entry of the user command" to "[1] user's selection of menu ***and*** [2] click on a menu choice from the menu") (emphasis added)) More importantly, the specification explicitly contemplates that retrieval of address data may be performed with more than one user input.[14] (*See* '843 patent, 9:53-54) ("[C]orrect addresses may

[13] This term appears in claims 1 and 23 of the '843 patent.

[14] Defendants argue that this passage refers to embodiments disclosed in the specification but not claimed, such as the specification's "Example 5." (Tr. at 129) The Court disagrees. Example 5 is consistent with the rest of the disclosure of the invention, and nothing in the intrinsic record supports reading excluding the example from the claims. *See generally PPC Broadband, Inc. v. Corning Optical Commc'ns RF, LLC*, 815 F.3d 747, 755 (Fed. Cir. 2016) ("[A] construction

be retrieved with ***a minimal number*** of user commands, 'clicks,' keystrokes, etc.") (emphasis added) The specification would not state that "a minimal number of user commands" may be used if it is always required in order to practice the claims to have no more than a single user command. Nothing in the specification suggests it is essential for the user only to interact with the input device ***once*** (as opposed to, for example, two or three times) in order to initiate an operation. Defendants' construction is unduly restrictive.[15] *See Hill-Rom*, 755 F.3d at 1373.

7. "providing for the user an input device configured so that a single execute command from the input device is sufficient to cause the performing"[16]

Arendi "providing an input device such that an input or series of inputs generates one command sufficient to initiate action (i), (ii), or (iii)"
Defendants "providing the user with an input device that is set up so that one user interaction with the input device is sufficient to cause performing of actions (i), (ii) and (iii)"
Court "providing an input device such that an input or series of inputs generates one command sufficient to initiate action (i), (ii), or (iii)"

The parties' dispute with respect to this term mirrors that of the last term: whether a user command is limited to "one user interaction" (as Defendants argue) or whether a user command may include a "series of inputs" (as Arendi argues). (D.I. 111 at 18-20; D.I. 112 at 16-18) For the reasons explained above, the Court agrees with Arendi.

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which excludes the preferred embodiment is rarely, if ever correct.") (internal quotation marks omitted).

[15] Defendants' construction also introduces unnecessary ambiguity. Defendants have not articulated a workable standard for assessing what constitutes "one user interaction." Defendants' contend that a double-click is a single user interaction, but that a "single click two times interrupted by something else" is not a single user interaction. (Tr. at 128-29) Defendants have failed to explain why this is so or how their construction could be implemented.

[16] This term appears in claims 1, 9, and 17 of the '993 patent.

8. "while it is electronically displayed"[17]

Arendi "while the first contact information is electronically displayed"
Defendants "while the first contact information is electronically displayed in the document"
Court "while the first contact information is electronically displayed in the document"

Claim 1 of the '993 patent recites, in relevant part:

> (i) initiating an electronic search in the contact database for the first contact information ***while it is electronically displayed*** in order to find whether the first contact information is included in the contact database . . . .

(Emphasis added)

The parties' dispute centers on ***where*** the first contact information is displayed. Defendants contend that the first contact information is displayed in the document being edited by the user. (D.I. 111 at 24-25) Arendi counters that the first contact information need not be displayed in the document. (D.I. 112 at 21) The Court agrees with Defendants.

The intrinsic evidence demonstrates that the first contact information is electronically displayed ***in the document*** when the search for second contact information is initiated. The specification explains that "according to the present invention, the process of creating and updating records in an address database is significantly simplified, since this may now be performed ***directly from the word processor***." ('993 patent, 12:3-6) (emphasis added) In other words, the point of the invention is for a user to enter (first) contact information into the document being edited, and for corresponding (second) contact information to be looked up automatically based on what the user entered. This purpose is consistent with every embodiment disclosed in the specification. For example, every figure showing entry of the first contact

[17] This term appears in claims 1, 9, and 17 of the '993 patent.

information – Figures 3, 4, and 5 – shows the first contact information being displayed ***in the document***. Similarly, every embodiment described in the detailed description indicates that the electronic search occurs only after the user enters first contact information into the document being edited. (*See, e.g.*, '933 patent, 6:19-9:55) Even the passage of the specification relied on by Arendi supports Defendants' position: the passage establishes that the first contact information is in all cases retrieved from the document when the search is initiated. (*See* '933 patent, 12:38-45) ("Although ***the present invention is defined*** in terms of a program retrieving a name or portion thereof ***from a document*** before searching a database, the program may retrieve an address or portion thereof ***from the document*** before searching the database . . . .") (emphasis added) For these reasons, the Court will adopt Defendants' proposed construction. *See GPNE*, 830 F.3d at 1370-71.

Arendi argues that Defendants' construction would improperly exclude situations in which – due to "the user's settings and equipment" – the first contact information is obscured. (*See* D.I. 120 at 25) Yet Arendi's own construction – which also requires the first contact information to be displayed – would seem to suffer from the same purported flaw. More importantly, the patentee chose to limit its claims to initiating an electronic search while the first contact information "is electronically displayed." ('933 patent, cls. 1, 9, 17) The Court cannot read that limitation out of the claims.

B. '854 Patent[18]

1. "first application program" and "second application program"[19]

	"first application program"	"second application program"
Arendi	"a first independently executable computer application"	"computer program different from the first computer program"
Defendants	"word processing or spreadsheet computer program"	"contact management computer program"
Court	"word processing, spreadsheet, or similar computer program"	"information management or database computer program"

The parties' disputes boil down to whether the "first application program" and "second application program" may be any two, different computer programs (as Arendi argues), or whether the "first application program" must be a word processing program or spreadsheet program and the "second application program" must be a contact management program (as Defendants argue). (D.I. 117 at 13-15; D.I. 119 at 2-5) The Court concludes that the proper construction is something in between the parties' proposals.

Defendants are correct that the "first" and "second" application programs must be specific kinds of application programs. As noted above (*see supra* Section II.A), the invention claimed by the patents is directed to handling names and/or addresses in a "word processor" (as that term is defined in the patents) coupled to an "information management" or "database" program. (*See, e.g.*, '854 patent, 1:19-27, 9:64-10:30) Therefore, Arendi's construction, which would broadly include any kind of application program, is incompatible with the repeated and consistent disclosure of the specification. *See GPNE*, 830 F.3d at 1370-71.

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[18] In this section, unless otherwise indicated, citations to the record are to C.A. No. 13-919, and "Defendants" refers to Defendants Google and Oath.

[19] These terms appear in claims 13, 31, 50, and 79 of the '854 patent.

Defendants go too far, however, in narrowing the "first" application program specifically to a "word processing or spreadsheet" program, and narrowing the "second" application program specifically to a "contact management" program. The patents "define[]" the invention in terms of "word processors" ('854 patent, 9:64-10:3), but the patents define the term "word processor" to include not only conventional word processing programs and spreadsheet programs, but also other similar programs ("etc."). (*See* '843 patent, 1:28-32) Similarly, the patents "define[]" the invention in terms of "information management" or "database" programs ('854 patent, 10:4-10), which is broader than Defendants' proposed construction of "contact management computer program."

The Court's constructions reflect these conclusions. *See Phillips*, 415 F.3d at 1313 (noting importance of construing claim terms "in the context of the entire patent, including the specification").

2. **"means for marking without user intervention the first information to alert the user that the first information can be utilized in the second application program"**[20]

3. **"means for identifying without user intervention or designation the first information"**[21]

4. **"[means/computer-readable medium . . . including program instructions] for using a first computer program to analyze the document, without direction from the operator, to identify text in the document that can be used to search for related information"**[22]

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[20] This limitation appears in claims 13 and 31 of the '854 patent.

[21] This limitation appears in claims 50 and 79 of the '854 patent.

[22] This limitation appears in claims 98 and 101 of the '854 patent.

Arendi Function: "marking without user intervention the first information to alert the user that the first information can be utilized in the second application program" "identifying without user intervention or designation the first information" "[means for/computer readable medium … including program instructions for] for using a first computer program to analyze the document, without direction from the operator, to identify text in the document that can be used to search for related information" Structure: "programming and logic configured to perform the algorithms disclosed at Col. 3 ll. 48-54, Col. 4 ll. 32-49, and Col. 10 ll. 17-22 or its equivalent"
Defendants Indefinite
Court Indefinite

The claim limitations at issue here all involve determining that text in a document is name and/or contact data that can be used to retrieve related data from another program. The parties agree that these limitations are means-plus-function elements under pre-AIA 35 U.S.C. § 112, sixth paragraph. (*See* D.I. 119 at 7-9) The central issue with respect to these limitations is whether the specification discloses sufficient structure to implement the claimed functions. (*See* D.I. 117 at 5-9; D.I. 119 at 7-9) In particular, the parties dispute whether the specification sufficiently discloses an algorithm for "marking," "identifying," or "analyz[ing]" text "without user intervention." (*Id.*)

The Court agrees with Defendants that the specification fails to disclose an algorithm to implement the claimed "marking," "identifying," and "analyz[ing]" functions. The specification describes determining name and/or address information entered by a user that can be used to search an external database. (*See, e.g.*, '854 patent, 3:48-54) The specification also states that certain designators and abbreviations (such as "street," "Dr.," and "Inc.") can be "analyz[ed]" to determine searchable name/address information. ('854 patent, 4:32-39) But the specification

fails to disclose any actual ***algorithm*** – whether in prose, as a mathematical formula, as a flow chart, or in any other suitable format – that could be followed to determine ***which text***, of all of the text in a document, is a name or address. Therefore, the specification does not sufficiently disclose structure to make the means-plus-function claims definite. *See Aristocrat Techs. Australia PTY Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008) (holding that where means-plus-function limitation is implemented using general-purpose computer, specification must disclose algorithm to achieve claimed function).

Arendi's reliance on the passage of the specification describing the use of certain designators is unavailing. (*See* D.I. 119 at 7-8) The relied-upon passage states that, to identify name and/or address information:

> The program analyzes what the user has typed in the document . . . for example, by analyzing (i) paragraph/line separations/formatting, etc.; (ii) street, avenue, is [sic] drive, lane, boulevard, city, state, zip code, country designators and abbreviations, etc.; (iii) Mr., Mrs., Sir, Madam, Jr., Sr. designators and abbreviations, etc.; (iv) Inc., Ltd., P.C., L.L.C, designators and abbreviations, etc.; and (v) a database of common male/female names, etc.

('854 patent, 4:32-39) This disclosure is not an algorithm. Although the specification states that certain "designators and abbreviations" ***could be used*** to determine that text is a name or address, the specification does not explain ***how*** these designators are actually used to determine which words in a document are (and are not) a name or address. For example, the specification fails to describe how, after a word like "Street" is identified, the computer program determines which words before or after the identified word are part of (and are not part of) the address. Without

this disclosure, a POSA is left wondering as to how the specification actually implements the claimed function.[23]

5. **"means for responding to a user selection by inserting a second information into the document, the second information associated with the first information from a second application program"**[24]

6. **"[means for/computer readable medium ... including program instructions for] inserting the information located in (2) into the document"**[25]

7. **"wherein the means for inserting the second information into the document further comprises means for adding the second information to the first information in the document"**[26]

Arendi Function: "responding to a user selection by inserting a second information into the document, the second information associated with the first information from a second application program" "[means for/computer readable medium . . . including program instructions for] inserting the information located in (2) into the document" "inserting the second information into the document further comprises means for adding the second information to the first information in the document" Structure: "programming and logic configured to perform the algorithms disclosed at Col. 3 ll. 63-66, Col. 4 ll. 46-51, Col. 5:67 – Col. 6 l. 4, Col. 7 ll. 5-6 and 11, Col. 7 ll. 48-49 or its equivalent"
Defendants Indefinite

[23] The disclosure here is in sharp contrast to the "detailed prose" describing the algorithm in *TecSec, Inc. v. IBM Corp.*, 731 F.3d 1336 (Fed. Cir. 2013) (upholding means-plus-function limitations implemented on general-purpose computer), to which Arendi unpersuasively compares the present case.

[24] This term appears in claims 13 and 50 of the '854 patent.

[25] This term appears in claims 98 and 101 of the '854 patent.

[26] This term appears in claim 53 of the '854 patent.

Court
Indefinite

The parties have two disputes regarding these terms: (1) whether the limitation at issue in claim 98 should be construed as a means-plus-function claim;[27] and (2) whether the limitations at issue are indefinite. (D.I. 117 at 10-11; D.I. 119 at 9-12) The Court addresses each issue in turn.

a. Claim 98

Claim 98 is directed to a computer-readable medium "including program instructions for performing the steps of: . . . (3) inserting the information located in step (2) into the document." Step (2) recites retrieving information from a database that is related to information in a document.

Although claim 98 does not use the word "means", the Court concludes it is a Section 112, paragraph 6 limitation. A claim limitation that does not use the word "means" may nevertheless warrant treatment under Section 112, paragraph 6 if the limitation merely uses a nonce word to connote a generic "black box" for performing a computer-implemented method. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1350 (Fed. Cir. 2015). In claim 98, the only structure recited for the function of "inserting" is the "computer readable medium program including instructions." This is a generic black box and does not give a POSA a sufficiently definite "indication of [the] structure" (i.e., algorithm) claimed. *Id.* Therefore, the "inserting" limitation of claim 98 will be treated as a means-plus-function limitation. *See id.*

[27] Arendi identified claim 98 as including a means-plus-function limitation in the Joint Claim Construction Chart. (D.I. 112 at 16, 20, 21) The Court will nevertheless independently consider whether the limitation warrants means-plus-function treatment.

b. Indefiniteness

The Court agrees with Defendants that the specification fails to disclose sufficient structure for the "inserting" function claimed by these limitations. (*See* D.I. 117 at 10-11) The specification explains that after a user types a name into a word processor, "[i]f the program finds name(s) and address(es) corresponding to the part of the addressee's name typed, this additional information is automatically entered into that user's word processor." ('854 patent, 3:63-66) The specification also provides several examples in which this insertion occurs. (*See* '854 patent, Figures 1, 2, 4) However, the specification does not explain ***how***, algorithmically, this insertion of address data into the document is to occur. Importantly, extrinsic evidence suggests that there are many possible algorithms that could be used to achieve the functional result of insertion. (*See* D.I. 117-1 Ex. 7A, Fox[28] Decl. ¶ 51 ("A person of ordinary skill in the art . . . would wonder (1) how information from a second application program is obtained from that program, (2) how it is communicated to a first application program, and (3) how an operation with that information is performed by the first application program."); *id.* ("[A] person of ordinary skill in the art would wonder exactly where the insertion or addition would occur, how the document that is changed would be formatted, if and how hyphenation might be done, how lines would be split, how pagination would be decided, if and how text wrapping around figures or tables would be done, how justification (e.g., left, right, centered, full) would be carried out, etc.")) In view of the extrinsic evidence as to the multiplicity of possible algorithms for inserting information into a document, and the specification's lack of any disclosure of any particular algorithm or algorithms for doing so, the Court concludes that the specification fails to disclose sufficient structure for the "inserting" function and, thus, the limitation is indefinite. *See*

[28] Dr. Edward A. Fox is a technical expert for Defendants.

Aristocrat, 521 F.3d at 1337 (noting that for specification to disclose sufficient structure for means-plus-function claim, POSA must "have understood [the] ***disclosure*** to encompass software to perform the [claimed] function") (emphasis in original; alterations omitted).

Arendi's analogy to *AllVoice*, 504 F.3d at 1236, is unavailing. The specification in *AllVoice* disclosed a specific protocol ("the dynamic data exchange ('DDE') protocol in the Windows operating system") and a detailed flow chart with multiple branches and over a dozen elements for implementing the means-plus-function limitations at issue. *Id.* at 1245-46. Here, by contrast, the specification includes no specific protocols, no flow-charts, and no other description of how the claimed "inserting" function is to be implemented.

Arendi reliance on testimony by Dr. Levy[29] and Dr. Menasce[30] fails to persuade the Court otherwise. Arendi relies on these experts for the proposition that a POSA would have known several ways to insert information into a document. (*See* D.I. 130 at 12-13) But that is part of the problem – and plainly is not the solution – here. The issue before the Court is not whether a POSA would know, given the specification, how to implement the claimed "inserting" function, but instead whether a POSA would recognize the ***specification itself*** as disclosing a particular algorithm or algorithms for implementing the "inserting" function. *See Aristocrat*, 521 F.3d at 1336 ("Whether the disclosure would enable one of ordinary skill in the art to make and use the invention is not at issue here. Instead, the pertinent question in this case is whether [the] patent discloses structure that is used to perform the claimed function."). As noted above, the

[29] Dr. John Levy is a technical expert for Arendi.

[30] Dr. Daniel A. Menasce was retained by Defendants Google, Motorola, and Apple during the '854 IPR proceedings.

specification itself does not inform a POSA as to which algorithm – of the many that the experts agree exist – to use to perform the claimed "inserting."

Arendi objects to Dr. Fox's testimony that the specification does not disclose how hyphenation, pagination, and text wrapping are to be performed when text is inserted, contending that these specific algorithmic decisions are not claimed. (*See* D.I. 130 at 12) But the lack of specificity in the claims and the specification hurts Arendi's case. Arendi chose to claim the limitations at issue here in means-plus-function format, but Arendi has not "paid the price" for functional claiming by disclosing a particular algorithm in the specification. *See Aristocrat*, 521 F.3d at 1337. Arendi "is in essence arguing for pure functional claiming as long as the function is performed by a general purpose computer. [The Federal Circuit's] cases flatly reject that position." *Id.* at 1336.

8. "means for responding to a user selection by performing an operation related to a second information"[31]

Arendi Function: "responding to a user selection by performing an operation related to a second information, the second information associated with the first information from the second application program" Structure: "programming and logic configured to perform the algorithms disclosed at Col. 14-34, Col. 3 l. 63 – Col. 4 l. 8, Col. 4 ll. 12-18, Col. 4 ll. 46-49, Col. 4 l. 62 - Col. 5 l. 8, Col. 7 ll. 3-16 and 37-66, Col. 8 ll. 18-51, Figs. 1, 2, 4, 9, 10, 11, 12, 13, and 16 or its equivalent"
Defendants Indefinite
Court Indefinite

The parties dispute whether the specification sufficiently discloses structure for the "responding" means-plus-function limitation. (D.I. 117 at 12-13; D.I. 119 at 14-15) The Court agrees with Defendants that the specification fails.

[31] This term appears in claims 31 and 79 of the '854 patent.

The specification discloses several "operation[s]" that could be performed relating to "second information," but does not disclose algorithms to implement these operations. Broadly speaking, the "responding" limitations claim performing "an operation" related to "second information" (e.g., a mailing address, email address, or phone number) associated with "first information" (e.g., a name). The specification provides several examples of what the "operation" can be:

- Entering address data into a document either automatically or after user input. (*See, e.g.*, '854 patent, 3:63-66; 4:46-49)
- Prompting the user to correct data retrieved from the database. (*See, e.g.*, '854 patent, 3:67-4:11)
- Sending an e-mail, faxes, etc. to an address or phone number retrieved from the database. (*See, e.g.*, '854 patent, 4:12-18)
- Creating mail merge letters and group emails. (*See, e.g.*, '854 patent, 4:16-18)

However, as Defendants point out (D.I. 117 at 12-13), the specification describes the "operation" in each of these example in terms of a functional ***result*** (e.g., that data is entered into a document, that an email is sent, or that a mail-merged document is created) and not as an ***algorithm*** that, when executed, would achieve the result. For example, as discussed in detail above, the specification does not explain ***how*** an address is to be inserted into a document. (*See supra* Section II.B.5-7) Nor does the specification provide an algorithm for any other disclosed "operation" on "second information." Therefore, the specification fails to disclose sufficient structure for the "responding" means-plus-function limitations.[32]

[32] Arendi's analogy to *TecSec, Inc. v. Int'l Bus. Machines Corp.*, 731 F.3d 1336, 1349 (Fed. Cir. 2013), is, thus, unpersuasive because there, unlike here, the algorithms implementing the claimed functions were disclosed so thoroughly that "[s]hort of providing source code, it [was] difficult to envision a more detailed disclosure."

Arendi misses the mark with its argument that "[a POSA] would understand how to program the software to yield the results shown" in the specification. (*See* D.I. 130 at 14) The relevant inquiry is ***not*** whether a ***POSA would know*** how to write software to dial a phone number, send an email, etc., but whether the ***specification discloses a particular algorithm*** for doing so. *See Aristocrat*, 521 F.3d at 1337; *see also supra* Section II.B.2-4. The specification fails to meet this requirement.

9. "means for initializing the second application program"[33]

Arendi Function: "initializing the second application program" Structure: "programming and logic configured to perform the algorithms disclosed at Col. 3 ll. 42-54, Col. 5 ll. 65-67, Col. 6 ll. 13-16, Col. 6 ll. 48-51, or its equivalent"
Defendants *Indefinite*
Court Indefinite

Claim 15 of the '854 patent recites:

> The computer system of claim 13, wherein the means for inserting the second information into the document further comprises:
>
> ***means for initializing the second application program;***
>
> means for searching, using the second application program, for the second information associated with the first information; and
>
> means for retrieving the second information.

(Emphasis added)

The parties dispute whether the specification discloses sufficient structure for the "initializing" function claimed in this limitation. (D.I. 117 at 9-10; D.I. 119 at 12-13) The Court agrees with Defendants that it does not.

[33] This limitation appears in claim 15 of the '854 patent.

Arendi contends that sufficient structure for the "initiating" function is disclosed in the following passage and other similar passages:

> Accordingly, in a word processor, the button is added and a user types information, such as an addressee's name, or a part of the name, etc. in a document created with the word processor, such as a letter, fax, etc., and ***then clicks, selects, commands, etc. the button via the appropriate input device, such as a touch screen button, keyboard button, icon, menu choice, voice command device, etc***. A program then executes and retrieves the typed information from the document, and searches an information management source, such as a database, file, database program, contact management program, etc. (hereinafter called "database") to determine if the information, such as the name or part of the name typed and searched by the program exists in the database.

(D.I. 119 at 13 (citing '853 patent, 3:42-54) (emphasis in original))

Although this passage discloses the process by which ***the user can trigger*** the search for "second information" (e.g., address data corresponding to a name entered by a user), the passage does not explain ***how*** the claimed ***computer system actually initializes*** (e.g., launches or makes ready for search) the second application (e.g., the contact management database). Nothing else in the specification remedies this deficiency. Moreover, expert testimony from both sides establishes that a POSA would know multiple algorithms for initializing an application. (*See* D.I. 130-1 Ex. 5F, Levy Decl. ¶ 32; D.I. 117-1 Ex. 7A, Fox Decl. ¶¶ 44-47) The specification fails to place a POSA on sufficient notice of which of these algorithms are claimed – and which are not claimed – by the "initializing" means-plus-function limitation. The limitation is, therefore, indefinite. *See Aristocrat*, 521 F.3d at 1337.

Arendi's comparison of the "initializing" limitation here to the limitation upheld in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1340 (Fed. Cir. 2016), is unpersuasive. In *Enfish*, the Federal Circuit upheld a means-plus-function limitation where the specification explicitly disclosed three of the four steps of an algorithm implementing the claimed function,

and implementation of the fourth step would have been known to a POSA. *See id.* at 1340 ("The fact that this algorithm relies, ***in part***, on techniques known to a person of skill in the art does not render the composite algorithm insufficient under § 112, ¶ 6.") (emphasis in original). Here, instead of merely using the knowledge of a POSA to provide the implementation of a ***step of an algorithm*** disclosed in the specification, Arendi seeks to use the knowledge of a POSA to provide ***the algorithm itself***. Whereas a POSA's knowledge could be used in *Enfish* to address the "omission of [] detail" as to an algorithm's implementation, a POSA's knowledge cannot overcome the specification's failure here to disclose the algorithm "at all." *See Aristocrat*, 521 F.3d at 1332-37; *cf. id.* at 1337 ("The question thus is not whether the algorithm that was disclosed was described with sufficient specificity, but whether an algorithm was disclosed at all.").

III. CONCLUSION

An appropriate Order follows.